

General Description

The EA8101 is a high switching frequency, high efficiency synchronous buck regulator, designed to operate from 2.5V to 5.5V input voltage range. Built-in low $R_{DS(ON)}$ high/low side Power-MOSFETS not only reduce external components and has up to 95% efficiency, ideal for 1A output current applications. The EA8101 features 100% duty cycle low dropout operation, extending battery life in portable systems. Besides, this device is designed to take into account the light load mode operation and can provide high efficiency over a wide range of the load current. The internal compensation design not only allows users to more simplified application, and can reduce the cost of external components. The EA8101 is available in the SOT-23-5 and TSOT-23-5 packages and easy to use.

Features

- ▶ Built-in Low $R_{DS(ON)}$ Power-MOSFETS
- ▶ Efficiency Up to 95%
- ▶ 2.5V to 5.5V Input Voltage Range
- ▶ Adjustable Output Voltage Range from 0.6V to V_{in}
- ▶ Fixed 1.5MHz Switching Frequency
- ▶ 1A Continuous Load Current
- ▶ 100% Duty Cycle Low Dropout Operation
- ▶ 45 μ A Low Quiescent Current
- ▶ <1 μ A Shutdown Current
- ▶ Internal Compensation
- ▶ Cycle-by-Cycle Current Limit
- ▶ Short Circuit Protection
- ▶ OTP Protection
- ▶ Available in SOT-23-5 and TSOT23-5 Packages

Applications

- ▶ Netcom Products
- ▶ Set-Top-Box
- ▶ LCD TVs and Flat TVs
- ▶ PDAs



Pin Configurations

